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		Complete if Known				
FEE TRAN	SMITTAL	Application Number	09/720,932			
	_	Filing Date	1/12/2001			
for FY	2004	First Named Inventor	Beamer Kevin Kruer 1773			
Effective 10/01/2003. Patent fees		Examiner Name				
		Art Unit				
policant Claims small entity status. See 37 CFR 1.27		Attorney Docket No.	ESD.001			

METHOD OF PAYMENT (check all that apply)				FEE CALCULATION (continued)						
Check Credit card Money Other None			3. ADDITIONAL FEES							
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Deposit Account Name  Static Control Components, Inc.			1052	50	2052	25	Surcharge – late provisional filing fee or cover sheet	/		
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	770	2001	385	Utility filing fee	1255	2,010	2255	1,005	Extension for reply within fifth month	
1002	340	2002	170	Design filing fee	1401	330	2401	165	Notice of Appeal	
1003	530	2003	265	Plant filing fee	1402	330	2402	165	Filing a brief in support of an appeal	330.00
1004	770	2004	385	Reissue filing fee	1403	290	2403	145	Request for oral hearing	· · · · · · · · · · · · · · · · · · ·
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	ee (\$)	Fee Code	Fee (\$)	Fee Description	8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1202	18	2202	9	Claims in excess of 20	1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))	
1201	86	2201	43	Independent claims in excess of 3	1810	770	2810	385	For each additional invention to be examined (37 CFR 1.129(b))	
1203			1801	770	2801	385	Request for Continued Examination (RCE)			
1204	86	2204	43	**Reissue independent claims over original patent	1802	900	1802	900	Request for expedited examination of a design application	
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SUBMITTED BY					Complete (if applicable)	
Name (Print/Type)	Steven R. Quinley	$\overline{}$	Registration No. (Attorney/Agent)	47012	Telephone	(919) 774-3808
Signature	CAR !	1	\		Date	5-27-2004

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May 27, 2004

### VIA EXPRESS MAIL

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

RE: An Electrostatic Shielding, Low Charging Retaining Moisture Barrier Film

Invention of Brent Beamer

Application Number: 09/720,932

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Respectfully submitted

Steven R. Quinley

Registration No. 47,012

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EXPRESS MAIL NUMBER: EE751721451US

ESD.001



Patent

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of

Brent Beamer

For:

An Electrostatic Shielding, Low Charging

Retaining Moisture Barrier Film

Serial No.

09/720,932

Filed

January 2, 2001

Group

1773

Examiner

Kruer, Kevin R.

Sanford, North Carolina May 27, 2004

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

# **APPELLANT'S BRIEF**

Sir: ·

#### 1. The Real Party In Interest

The real party in interest is the assignee, Static Control Components, Inc.

# 2. Related Appeals and Interferences

None.

### 3. Status of the Claims

This is an appeal from the January 2, 2004 final rejection of claims 1-3, 5-12, and 14-30,

all of the pending claims. Claims 1-3, 5, 6, 8-10, 27 and 28 were rejected under 35 U.S.C. § 103(a) as being unpatentable over White U.S. Patent No. 4,699,830 (White) in view of Havens U.S. Patent No. 5,175,033 (Havens), as evidenced by Wang et al. U.S. Patent No. 4,104,516 (Wang) and Golike et al. U.S. Patent No. 5,091,229 (Golike). Claims 7 and 11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over White in view of Havens, as evidenced by Wang, and further in view of Akao et al. U.S. Patent No. 4,906,517 (Akao). Claim 19 was rejected under 35 U.S.C. § 103(a) as being unpatentable over White in view of Havens, as evidenced by Wang, and further in view of Rayford et al. U.S. Patent No. 4,738,882 (Rayford). Claims 20 and 21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over White in view of Havens and Rayford, as evidenced by Wang, and further in view of Mott U.S. Patent No. 4,756,414 (Mott).

#### 4. Status of Amendments

The claims stand as last amended on October 6, 2003.

# 5. <u>Summary of the Invention</u>

The present invention relates generally to improvements in packaging materials, and more particularly to a film material for use in packaging electrostatically sensitive components and corrosion sensitive components.

In one aspect, a film is provided having excellent electrostatic and moisture barrier properties while not retaining charge on the surface of the film. As shown in Fig. 1, in one embodiment of the present invention, a heat sealable static dissipative polymer 1 is utilized as the base layer for the film material. This heat sealable static dissipative polymer 1 will become the interior of any packaging material made from the film. The heat sealable static dissipative polymer 1 advantageously allows charge to bleed off of any component placed inside the

packaging material, and is resistant to triboelectrification which might occur when the component is placed inside the package. The heat sealable static dissipative polymer 1 is attached to a nonmetallized surface of a first moisture barrier 2 by a first tie layer 23. A metallized surface of the first moisture barrier 2 is attached to a nonmetallized surface of a second moisture barrier 3 by a second tie layer 24. A low charge retaining coating 4 is attached to a metallized surface of the second moisture barrier 3. The metallized surfaces serve as moisture barriers, and also act as faraday cages to electrically isolate material placed in the interior of a package from external influences. The low charge-retaining coating 4 provides protection from nicks and scratches, and also allows any charge which may build up on the metallized surface of the second moisture barrier 3 to bleed away, thus preventing any electrostatic damage to components from charge retained on the surface of a package formed from the film.

By way of example, claim 1 of the present invention reads as follows:

- 1. A low charge retaining film material for packaging that protects items from electrostatic discharge and from moisture caused corrosion said material comprising:
  - a) a heat sealable static dissipative polymer;
  - b) a first moisture barrier, said first moisture barrier having a nonmetallized surface, wherein the nonmetallized surface is attached to the heat sealable static dissipative polymer by a first tie layer;
  - a second moisture barrier attached to the first moisture barrier, said second moisture barrier having a metallized surface and a nonmetallized surface, wherein the nonmetallized surface is attached to a metallized surface of the first moisture barrier by a second tie layer; and

 a low charge retaining coating attached to the metallized surface of the second moisture barrier.

# 6. The Issue For Review

The sole issue for review is whether claims 1-3, 5-12, and 14-30 were properly rejected under 35 U.S.C. § 103 and the standard set forth in M.P.E.P § 706.02, where these claims clearly recite a combination of features not shown and not suggested by the relied upon art, and there is no suggestion to modify the proposed combination of the relied upon references to result in the claimed invention.

### 7. Grouping of Claims

The rejected claims do not stand or fall together. The claims should initially be considered in Groups I-V based upon the differences between the independent claims: namely, Group I, claims 1 and 27; Group II, claims 2-11, 28 and 30; Group III, claim 12; Group IV, claims 14-22 and 29; and Group V, claims 23-26. The independent claims 1, 2, 12, 14 and 23 each address aspects of "a low charge retaining film material for packaging that protects items from electrostatic discharge and from moisture caused corrosion."

Additionally, the dependent claims address a number of combinations and limitations not found in the independent claims. The following additional subject matter is noted: the low charge retaining layer comprising "carbon loaded polymer" and "carbon loaded acrylic" (claims 7 and 11, respectively); the moisture penetration rate of the film material being "less than .02 grams per 100 square inches per 24 hours" (claims 26-29); particular layer thickness (claims 5, 18 and 25); the metallized surface of the second moisture barrier being attached to the nonmetallized surface of the second moisture barrier by a third tie layer (claim 30); and the dielectric polymer being attached to the metal foil by a third tie layer (claim 15).

### 8. Argument

The final rejection under 35 U.S.C. § 103 did not follow M.P.E.P. § 706.02(j) which states:

After indicating that the rejection is under 35 U.S.C. 103, the Examiner should set forth...the difference or differences in the claim over the applied reference,...the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter, and...an explanation why one of ordinary skill in the art at the time the invention was made would have been motivated to make the proposed modification.

As will be illustrated below, the claims of the present invention are not obvious in view of the references relied upon by the Examiner.

#### A. The Section 103 Rejections

The art rejections are not supported by the relied upon art. 35 U.S.C. § 103 which governs obviousness indicates that "differences between the subject matter sought to be patented and the prior art" are to be assessed based upon "the subject matter as a whole". Analyzing the entirety of each claim, the rejections under 35 U.S.C. § 103 are not supported by the relied upon art as addressed further below. Only after an analysis of the individual references has been made can it then be considered whether it is fair to combine teachings. However, as addressed further below, fairness requires an analysis of failure of others, the lack of recognition of the problem, and must avoid the improper hindsight reconstruction of the present invention. Such an analysis should consider whether the modifications are actually suggested by the references rather than assuming they are obvious. The 35 U.S.C § 103 rejections made here pick and choose elements from a variety of separate references, none of which presents any motivation for making the suggested combination. This approach constitutes impermissible hindsight and must be avoided.

As required by 35 U.S.C. § 103, claims must be considered as a whole. When so considered, the present claims are not obvious.

Turning to the two references relied upon in rejecting all of the independent claims, White discloses a laminated sheet material for packaging electronic components. Referring to Figure 2 of White, White discloses a laminated sheet material for packaging electronic components including an antistatic layer 20, a first conductive metal layer 22 adhered to the antistatic layer 20 by an adhesive layer 24. A carrier or substrate layer 26 is disposed on the first metal layer 22 and a second metal layer 28 is disposed on the substrate layer 26. A topcoat layer 30 is disposed on the second metal layer 28 for protection of the second metal layer 28. The Examiner indicates that White does not teach a nonmetallized surface between the antistatic layer 20 and the first conductive metal layer 22, and then relies upon Havens to cure this admitted failing of White. Havens discloses a flexible sheet material for packaging electrostatically sensitive items. In one embodiment, as described at column 9, line 55, Havens discloses a laminate of "aluminum/polyester/adhesive/antistatic film."

Regarding claim 1, this claim recites "a second moisture barrier attached to the first moisture barrier, said second moisture barrier having a metallized surface and a nonmetallized surface, wherein the nonmetallized surface is attached to a metallized surface of the first moisture barrier by a second tie layer..." The Examiner relies upon the carrier or substrate layer 26 and the metal layer 22 of White as teaching the nonmetallized surface of the second moisture barrier and the metallized surface of the first moisture barrier, respectively, of the present invention. The metal layer 22 of White is deposited directly on this carrier film layer 26. See column 4, lines 25-29, where White states that "[t]he first conductive metal layer 22...can be deposited on the substrate [26] by any available means such as vacuum or sputter metallization." (emphasis

added). In other words, White only teaches that the metal layer 22 is deposited on the substrate 26 via techniques which deposit the metal layer 22 directly on the substrate 26.

In contrast to the relied upon art, the present invention, as claimed in claim 1, requires that "the nonmetallized surface is attached to a metallized surface of the first moisture barrier by a second tie layer..." White does not teach or render obvious such a tie layer. To the contrary, White teaches away from the present invention by requiring that the metal layer 22 be deposited directly on the substrate 26. See also column 5, lines 15-23, of White, where White indicates that a second metal layer 28 is "adhered, bonded, or deposited" on the other side of the substrate 26 "using any conventional technique such as vacuum or sputter metallization." Additionally, White teaches that his laminated material be thin to allow transmission of light through the material. Providing an additional layer to White's laminate, such as the claimed second tie layer, would diminish, if not eliminate, light transmission, and thus is clearly at odds with the teachings of White. A second tie layer as claimed by claim 1 is simply not taught or rendered obvious by the relied upon art.

Similarly, claim 2 requires a "nonmetallized surface of said second polymeric moisture barrier being attached to said metallized surface of said first polymeric moisture barrier by a second tie layer...." Claim 12 recites that "a nonmetallized surface said nonmetallized surface of said second moisture barrier being attached to a nonmetallized surface of the first moisture barrier by a second tie layer...." Claim 14 requires "a nonmetallized surface said nonmetallized surface of said second moisture barrier being attached to the metal foil by a second tie layer..." The use of a second tie layer as claimed by claims 2, 12 and 14 is not taught or rendered obvious by the relied upon art.

Claim 23 requires "a second tie layer attached to the polymeric moisture barrier; a

polymeric layer attached to the second tie layer; a third tie layer attached to the second polymeric layer; a metal foil attached to the third tie layer...." The relied upon art does not disclose such a claimed third tie layer. The Examiner appears to ignore these specifically claimed limitations and simply rationalizes that "the adhesive [of White] is understood to read on...the claimed 'third tie layer' of claim 23. Applicant respectfully disagrees. As discussed above, the relied upon art does not teach or suggest a second tie layer, much less a third tie layer. Additionally, the relied upon art does not teach a metal foil attached to the third tie layer, and a polymeric moisture barrier sandwiched between the second and third tie layers, as presently claimed.

Cleary, the relied upon art does not teach and does not render obvious the structures as presently claimed. Thus, independent claims 1, 2, 12, 14 and 23 are allowable over the relied upon art.

Claim 27 depends directly from claim 1, incorporating all of the limitations thereof and adding further limitations thereto. Claims 3-11, 28 and 30 depend directly or indirectly from claim 2, incorporating all of the limitations thereof and adding further limitations thereto. Claims 15-22 and 29 depend directly or indirectly from claim 14, incorporating all of the limitations thereof and adding further limitations thereto. Claims 24-26 depend directly or indirectly from claim 23, incorporating all of the limitations thereof and adding further limitations thereto. These dependent claims are allowable based upon their dependence on allowable independent claims. In addition, the dependent claims address a number of combinations of limitations not found in the applied references.

Claims 7 and 11 recite that the low charge retaining layer is "carbon loaded polymer" and "carbon loaded acrylic," respectively. After indicating that White does not teach such limitation, the Examiner relied upon Akao to cure this admitted failing of White. Akao discloses packaging

material for photosensitive materials. At column 5, lines 21-24, Akao states that:

The light-shielding ethylene copolymer resin film layer contains a light-shielding material. The light-shielding material includes every material capable of shielding visible light and ultraviolet light.

Both White and Havens desire that their packaging material be light transmissive and not light-shielding as required by Akao. See White column 5, lines 50-68 and Havens column 4, lines25-29. Applicant respectfully submits that Akao teaches away from White and Havens, and thus should not be combined with these references. Accordingly, Applicant believes claims 7 and 11 are in order for allowance.

Regarding claims 26-29, these claims each recite that the moisture penetration rate of the film material "is less than .02 grams per 100 square inches per 24 hours." The Examiner rejects these claims by stating that:

White teaches that the thickness of the conductive metal layers should be varied...[and] the thicker...the deposited layer, the better the moisture barrier properties. Thus, by varying the thickness in order to obtain the desired surface resistivity...one of ordinary skill in the art would necessarily obtain the claimed moisture barrier properties.

Applicant respectfully disagrees with this reasoning. As White teaches that the various layers should be should be thin enough to allow light transmission, any suggestion to increase the thickness of the layers to provide moisture protection is completely contrary to the disclosure of White. Thus, Applicant submits that the relied upon art does not teach or render obvious claims 26-29.

Regarding claims 5, 18 and 25, while admitting that White does not teach the presently claimed layer thickness, the Examiner rejected claims 5, 18 and 25 by stating that:

White does teach that the thickness of the metal will vary depending upon desired surface resistivity...[and] it would have been obvious to one of ordinary skill in the art to vary the thickness of the metal layer taught in White in order to optimize the film's transparency and surface resistivity.

Applicant respectfully disagrees. This lack of teaching by White is indicative of its failing as a reference, and not the obviousness of these claims, and thus submits that claims 5, 18 and 25 are in order for allowance.

See also claim 30 which recites that the metallized surface of the second moisture barrier is attached to the nonmetallized surface of the second moisture barrier by a third tie layer, and claim 15 which recites that the dielectric polymer is attached to the metal foil by a third tie layer. Applicant respectfully submits that none of the references teach or render obvious a third tie layer as claimed in claims 15 and 30. Thus, these claims are in order for allowance.

To sum up, the relied upon art does not show and does not suggest a low charge retaining film material for packaging that protects items from electrostatic charge and from moisture caused corrosion as presently claimed. Nothing in the cited references indicates a recognition of the problems addressed by the present invention. Further, nothing in the cited references indicates a film material which would solve the problems addressed by the present invention. The claims of the present invention are not taught, are not inherent, and are not obvious in light of the art relied upon.

# B. The Examiner's Findings of Obviousness are Also Contrary to Law of the Federal Circuit

As shown above, the invention claimed is not suggested by the relied upon prior art. The references cited by the Examiner, if anything, teach away from the present invention. It is only in hindsight, after seeing the claimed invention, that the Examiner could combine the references as the Examiner has done. This is improper under the law of the Federal Circuit, which has stated that "[w]hen prior art references require selective combination by the Court to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gleaned from the invention itself." Uniroyal, Inc. v. Ludkin Riley Corp., 5 U.S.P.Q. 2d 1434, 1438 (Fed. Cir. 1988), cert. den., 102 L.Ed. 2d 51 (1988); quoting Interconnect Planning Corp. v. Feil, 227 U.S.P.Q. 543, 535 (Fed. Cir. 1985). Furthermore, "[i]t is impermissible to use the claims as a frame and the prior art references as a mosaic to piece together a facsimile of the claimed invention." Uniroyal Inc. v. Ludkin Riley Corp., 5 U.S.P.Q. 303, 312 (Fed. Cir. 1983), cert. den., 469 U.S. 851 (1984). Similarly, "[t]he mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification." In re Laskowski, 10 U.S.P.Q. 2d 1397, 1398 (Fed. Cir. 1989), quoting In re Gorgon, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984). No such suggestion is found here.

In addition, the Examiner does not appear to have considered "where the references diverge and teach away from the claimed invention", <u>Akzo N.V. v. International Trade</u>

<u>Commission</u>, 1 U.S.P.Q. 2d 1241, 1246 (Fed. Cir. 1986), <u>cert. den.</u>, 482 U.S. 909 (1987); and <u>W.L. Gore Associates</u>, <u>Inc.</u>, 220 U.S.P.Q. at 311; nor has the Examiner read the claims as a whole, as required by statute. 35 U.S.C. 103. <u>See also, Smithkline Diagnostics Inc. v. Helena</u>

<u>Laboratories Corp.</u>, 8 U.S.P.Q. 2d 1468, 1475 (Fed. Cir. 1988); and <u>Interconnect Planning Corp.</u> v. Feil, 227 U.S.P.Q. at 551.

In <u>In re Laskowski</u>, 10 U.S.P.Q. 2d 1397, the Federal Circuit reversed an obviousness rejection of the claims in an application for a bandsaw. The claimed bandsaw used a pulley type wheel loosely fitted with a tire. The primary reference showed a similar bandsaw where the band was tightly fitted. The Federal Circuit stated that the prior art did not provide a suggestion, reason or motivation to make the modification of the reference proposed by the Commissioner.

<u>Id.</u> at 1398. The Court added that "there must be some logical reason apparent from the positive, concrete evidence of record which justifies a combination of primary and secondary references."

<u>Id.</u> quoting <u>In re Regal</u>, 188 U.S.P.Q. 136, 139 (C.C.P.A. 1975), citing <u>In re Stemniski</u>, 170

U.S.P.Q. 343 (C.C.P.A. 1971).

In <u>Uniroyal Inc. v. Ludkin Riley Corp.</u>, 5 U.S.P.Q. 2d 1434, the Federal Circuit reversed the District Court's finding that the claims for a patent for an air flow deflecting shield were obvious. Without any suggestion in the art, the District Court improperly chose features from several prior art references to recreate the claimed invention.

The Examiner's rejection suggests that the Examiner did not consider and appreciate the claims as a whole. The claims disclose a unique combination with many features and advantages not shown in the art. It appears that the Examiner has oversimplified the claims and then searched the prior art for the constituent parts. Even with the claims as a guide, however, the Examiner did not recreate the claimed invention.

# 9. <u>Conclusion</u>

The rejection of claims 1-3, 5-12, and 14-30 should be reversed and the application promptly allowed.

Respectfully submitted,

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# APPENDIX (Claims Under Appeal)

- 1. A low charge retaining film material for packaging that protects items from electrostatic discharge and from moisture caused corrosion said material comprising:
  - a) a heat sealable static dissipative polymer;
  - b) a first moisture barrier, said first moisture barrier having a nonmetallized surface, wherein the nonmetallized surface is attached to the heat sealable static dissipative polymer by a first tie layer;
  - a second moisture barrier attached to the first moisture barrier, said second moisture barrier having a metallized surface and a nonmetallized surface, wherein the nonmetallized surface is attached to a metallized surface of the first moisture barrier by a second tie layer; and
  - d) a low charge retaining coating attached to the metallized surface of the second moisture barrier.
- 2. A low charge retaining film material for packaging that protects items from electrostatic discharge and from moisture caused corrosion, said material comprising:
  - a) a heat sealable static dissipative polymer;
  - a first polymeric moisture barrier having two surfaces, a metallized surface and a nonmetallized surface, said nonmetallized surface of said first polymeric moisture barrier being attached to said heat sealable static dissipative polymer by a first tie layer;
  - a second polymeric moisture barrier having two surfaces, a metallized surface and a nonmetallized surface, said nonmetallized surface of said second polymeric moisture barrier being attached to said metallized surface of said first polymeric moisture barrier by a second tie layer; and
  - d) a low charge retaining coating attached to said metallized surface of said second polymeric moisture barrier.

- 3. A material as in claim 2 wherein the first and second tie layers are adhesives.
- 5. A material as in claim 2 wherein the metal of each of the metallized surfaces of the first and second polymeric moisture barrier is aluminum and the aluminum is at least 170 Angstroms thick.
- 6. A material as in claim 2 wherein the heat sealable static dissipative polymer has a conductivity of between  $10^{-1}$  and  $10^{-10}$  Siemens.
- 7. A material as in claim 2 wherein the low charge retaining layer is a carbon loaded polymer with a conductivity of between  $1 \times 10^{-3}$  and  $1 \times 10^{-9}$  Siemens.
- 8. A material as in claim 2 wherein the metallized surfaces of the first and second polymeric moisture barriers are vapor deposited aluminum.
- 9. A material as in claim 2 wherein the metallized surfaces of the first and second polymeric moisture barriers are vapor deposited nickel.
- 10. A material as in claim 2 wherein the metallized surfaces of the first and second polymeric moisture barriers are vapor deposited copper.
- 11. The material as in claim 2 wherein the low charge-retaining coating is a carbon loaded acrylic.
- 12. A low charge retaining film material for packaging that protects items from electrostatic discharge and corrosion said material comprising:
  - a) a heat sealable static dissipative polymer;
  - b) a first moisture barrier including a metal foil attached to said heat sealable static dissipative polymer, wherein said metal foil is attached to said heat sealable static dissipative polymer by a first tie layer;

- c) a second moisture barrier with a metallized surface and a nonmetallized surface said nonmetallized surface of said second moisture barrier being attached to a nonmetallized surface of the first moisture barrier by a second tie layer; and
- d) a low charge retaining coating attached to the metallized surface of the second moisture barrier.
- 14. A low charge retaining film material for packaging that protects items from electrostatic discharge and corrosion said material comprising:
  - a) a heat sealable static dissipative polymer;
  - b) a dielectric polymer attached to the heat sealable static dissipative polymer by a first tie layer;
  - c) a metal foil attached to the dielectric polymer to form a first moisture barrier;
  - d) a second moisture barrier with a metallized surface and a nonmetallized surface said nonmetallized surface of said second moisture barrier being attached to the metal foil by a second tie layer; and
  - e) a low charge retaining coating attached to the metallized surface of the second polymeric moisture barrier.
- 15. A low charge retaining film as in claim 14 wherein the dielectric polymer is attached to the metal foil by a third tie layer.
- 16. A film material as in claim 15 wherein the first tie layer, the second tie layer, and the third tie layer are adhesives.
  - 17. A film material as in claim 16 wherein the metal foil is an aluminum foil.
- 18. A film material as in claim 17 has a thickness of between .0002 inches and .0005 inches.
  - 19. A film material as in claim 15 wherein the dielectric polymer is a biaxly oriented

nylon.

- 20. A film material as in claim 19 wherein the second moisture barrier is a metallized polyethylene.
- 21. A film material as in claim 20 wherein the metallized surface is aluminum between 170 and 400 Angstroms thick.
- 22. A film material as in claim 16 wherein the low charge retaining coating and the metallized surface of the second moisture barrier together have a surface conductivity of between 10<sup>-3</sup> and 10<sup>-9</sup> Siemens.
- 23. A low charge retaining film material for packaging that protects items from electrostatic discharge and corrosion said material comprising:
  - a) heat sealable static dissipative polymer;
  - b) a first tie layer attached to the heat sealable static dissipative polymer;
  - a polymeric moisture barrier having two surfaces, a metallized surface and a nonmetallized surface said nonmetallized surface being attached to the first tie layer;
  - d) a second tie layer attached to the polymeric moisture barrier;
  - e) a polymeric layer attached to the second tie layer;
  - f) a third tie layer attached to the second polymeric layer;
  - g) a metal foil attached to the third tie layer; and
  - h) a low charge retaining coating attached to the metal foil.
- 24. A film material as in claim 23 wherein the heat sealable static dissipative polymer is an antistat treated polyethylene.
- 25. A film material as in claim 24 wherein the metal foil is comprised of aluminum foil, and wherein the metallization of the metallized surface of the polymeric moisture barrier is

aluminum between 170 and 400 Angstroms thick.

- 26. A film material as in claim 25 wherein the moisture penetration rate is less than .02 grams per 100 square inches per 24 hours.
- 27. A film material as in claim 1 wherein the moisture penetration rate is less than .02 grams per 100 square inches per 24 hours.
- 28. A film material as in claim 2 wherein the moisture penetration rate is less than .02 grams per 100 square inches per 24 hours.
- 29. A film material as in claim 14 wherein the moisture penetration rate of the material is less than .02 grams per 100 square inches per 24 hours.
- 30. The material as in claim 2, wherein the metallalized surface of the second moisture barrier is attached to the nonmetallized surface of the second moisture barrier by a third tie layer.